

JC20 Rec'd PCT/PTO 20 JUN 2005  
20020035 USAMENDMENTS TO CLAIMSWhat is claimed is:

1. (currently amended) A method for deflecting a projectile from an initial trajectory, said projectile having a first surface area and a second surface area and is moving at a velocity of from 300 m/sec. to 1500 m/sec. through a gaseous atmosphere with a surrounding plasma sheath, said method comprising the step of:

directing electromagnetic radiation toward the projectile, wherein said electromagnetic radiation having a wavelength of from 0.35 microns to 0.70 microns ~~has a frequency which~~ is absorbed by the plasma sheath to a significant degree but is not absorbed by the gaseous atmosphere to a significant degree.

2. (original) The method of claim 1 wherein the electromagnetic radiation is directed toward the first surface area of the projectile in preference to the second surface area of the projectile.

3. (original) The method of claim 2 wherein the first surface area and the second surface area are in opposed relation to each other.

4. (original) The method for claim 2 wherein the first surface area is an upper surface area and the second surface area is a lower surface area.

5. (original) The method of claim 2 wherein the first surface area is a front surface area and the second surface area is a side surface area.

6. (original) The method of claim 3 wherein the first surface area is a lower surface area and the second surface area is an upper surface area.

7. (original) The method of claim 2 wherein the first surface is a front surface and

the second surface is a side surface.

8. (original) The method of claim 1 wherein the electromagnetic radiation is light.

9. (original) The method of claim 7 wherein the electromagnetic radiation has a source which is a laser.

10. (original) The method of claim 1 wherein the electromagnetic radiation causes the plasma sheath to be heated.

11. (canceled)

12. (currently amended) The method of claim 10 wherein the plasma sheath has a first section adjacent the first surface area of the projectile and a second section adjacent the second surface area of the projectile and there is a temperature differential between said first section of the plasma sheaf and the second section of the plasma sheaf and the temperature differential results in a pressure differential between said first surface area and said second surface area.

13. (currently amended) The method of claim 12 wherein there is a transverse ~~traverse~~ momentum applied to the projectile.

14. (currently amended) The method of claim ~~[[14]]~~13 wherein the transverse momentum results in a transverse impulse which results in a deflecting force.

15. (original) The method of claim 1 wherein the projectile is a self-propelled rocket.

16. (original) The method of claim 1 wherein the projectile is an externally propelled shell.

17. (original) The method of claim 1 wherein the projectile is an air delivered bomb.

18. (canceled)

19. (canceled)

20. (currently amended) A method for deflecting a projectile from an initial trajectory, said projectile having a first surface area and a second surface area and is moving at a velocity of from 300 m/sec. to 1500 m/sec. through a gaseous atmosphere with a surrounding plasma sheath, said method comprising the step of:

directing electromagnetic radiation toward the projectile, wherein said electromagnetic radiation has a frequency so that the electromagnetic radiation is absorbed to a significant degree by the plasma sheath but is not absorbed to a significant degree by the gaseous atmosphere,

wherein the electromagnetic radiation is directed toward the first surface area of the projectile in preference to the second surface area of the projectile.

21. (currently amended) A method for deflecting a projectile from an initial trajectory, said projectile having a first surface area and a second surface area and is moving at a velocity of from 300 m/sec. to 1500 m/sec. through a gaseous atmosphere with a surrounding plasma sheath, said method comprising the step of:

directing electromagnetic radiation toward the projectile, wherein said electromagnetic radiation having a wavelength of from 0.35 microns to 0.70 microns ~~has a frequency~~ which is absorbed by the plasma sheath but is not substantially absorbed by the gaseous atmosphere ,

wherein the electromagnetic radiation causes the plasma sheath to be heated, and the plasma sheath has a first section adjacent the first surface area of the projectile and a second section adjacent the second surface area of the projectile and there is a temperature differential between said first section and said second section of the plasma sheath.